Snippets from the worldwide web

Sri Lanka Journal of Child Health, 2013; **42**(1): 45-47

Adding Epo to Hypothermia for Neonatal HIE May Boost Outcome

A phase 1 trial of erythropoietin (Epo) found that the drug, given to neonates with hypoxic-ischemic encephalopathy (HIE) along with hypothermia treatment, was well tolerated and may be neuroprotective. Hypothermia has long been the treatment for HIE, a cause of neonatal encephalopathy. However, not all infants benefit from treatment — 40% to 50% of cooled babies die or have moderate to severe disability, researchers report. In this early trial, the researchers added Epo to hypothermia treatment. They report that it was well tolerated and produced plasma concentrations found in animal models to be neuroprotective. The researchers say a large trial is needed to see whether the addition of Epo may further improve outcomes over hypothermia for neonates with HIE.

http://www.medscape.com/viewarticle/774495

Acellular Pertussis Vaccine Protection May Wane

Vaccine protection against pertussis appears to wane as the time since the last vaccination dose lengthens, according to results from a study conducted among California children. During a 2010 pertussis epidemic, California reported its largest number of pertussis cases in more than 60 years. A study analyzed the vaccination records of 682 children aged 4 to 10 years with suspected, probable, or confirmed pertussis cases and 2016 children of the same age without pertussis in 15 California counties. Their study was published in the November 28 issue of *JAMA*. The researchers found that more children diagnosed with pertussis either failed to receive all 5 pertussis doses or were never immunized with the diphtheria, tetanus, and acellular pertussis (DTaP) vaccine (53 children [7.8%] in the pertussis group compared with 19 children [0.9%] without pertussis). However, the researchers suggest that it is the length of time since the last of 5 DTaP doses that may drive a recent increase in pertussis cases.

http://www.medscape.com/viewarticle/775129

Many Children Eventually Outgrow Milk Allergy

By the time children with milk allergy are about five years old, most have outgrown the condition, according to findings of a large observational study. As reported online January 2 in the Journal of Allergy and Clinical Immunology, after a median of 66 months at last follow-up, 154 (52.6%) were no longer allergic to milk, as established by oral food challenge in 56 and successful introduction of uncooked milk products at home in the other 98. At five years, 21% of the children with unresolved allergy reported tolerating at least some baked milk products.

http://www.medscape.com/viewarticle/777574

Uncircumcised Boys and Men May Face More UTIs

Uncircumcised baby boys have infections of the kidney, bladder and urethra at nearly 10 times the rate of circumcised boys, and over a lifetime, uncircumcised males are four times more likely to experience one, according to a new meta-analysis from Australia. Circumcision provides considerable protection and over the lifespan makes about a three- to four-fold difference, which is quite striking in public health terms, according to the researchers. They examined 22 studies published between 1987 and 2012 that included a total of 407,902 males across the globe, a quarter of whom were uncircumcised.

http://www.medscape.com/viewarticle/775884

Overweight Kids More Likely to Be Deficient in Vitamin D

Vitamin D deficiency is common in overweight and obese children, especially in severely obese and minority children, according to a new report by Christy Boling Turer, MD, MHS, from the University of Texas South-western Medical Centre in Dallas, and colleagues. The report was published online December 24 in *Pediatrics*. The current study determined the prevalence of vitamin D deficiency (defined as 25-hydroxyvitamin-D levels lower than 20ng/mL) in a sample of 6- to 18-year-old children (n = 12,292) enrolled in the 2003 to 2006 National Health and Nutrition Examination Survey. The height and body weight of the children were measured, and the participants were classified as being healthy weight, overweight, obese, or severely obese. Vitamin D levels were also determined. Vitamin D deficiency increased with the degree of obesity.

http://www.medscape.com/viewarticle/776681

IVF Associated With Increased Risk for Childhood Asthma

Children who were born after a prolonged time to conception are more likely to be diagnosed with asthma, experience wheezing in the last year, and be prescribed anti-asthmatic medication. This association is particularly true for children born after assisted reproduction technologies (ART). Investigators cannot explain the mechanism behind this association. The UK-wide prospective study included 18,818 children who were recruited at 9 months of age. The authors analysed data from follow-up surveys at 5 and 7 years (n = 13,041 and n = 11,585, respectively). The authors compared the children of subfertile couples with the children of parents who conceived within 12 months of planning their conception. They also compared the different groups of subfertile parents (i.e. ovulation induction and ART). The researchers adjusted for social circumstances as well as contributors to the "hygiene hypotheses" such as firstborn status, presence of siblings, and childcare type. The results revealed a well-recognized socioeconomic gradient in childhood asthma.

http://www.medscape.com/viewarticle/775757

Cardiometabolic Improvement From Lifestyle Change Seen in Kids

According to the findings of a recent review and meta-analysis, lifestyle interventions effectively promote improvements in weight loss and cardiometabolic outcomes among obese and overweight children and adolescents. The authors note that previous reviews focused solely on changes in weight and that these reviews and others have all presented data on weight change outcomes; however, obese children and adolescents also carry an increased risk for cardio-metabolic complications, including dyslipidaemia, insulin resistance, and hypertension. To our knowledge, no systematic review has examined the effects of lifestyle interventions on cardio-metabolic outcomes in overweight children and adolescents.

http://www.medscape.com/viewarticle/774702

Childhood UTIs Do Not Appear to Impair Later Renal Function

Urinary tract infections (UTI) during childhood did not impair long-term kidney function, even when renal parenchymal defects were uncovered in follow-up ultrasonography (US), according to an article published in the December issue of the *Archives of Pediatric & Adolescent Medicine*. They measured renal growth, parenchymal damage, kidney function, and blood pressure in 193 children treated for UTI between 1993 and 2003. Of those participating in the study, 103 children (53%) had received antibiotic prophylaxis, 42 (22%) had undergone surgery, and all had been examined with US and voiding cystourethrography (VCUG). Children with major renal dysplasia or urinary tract obstruction were excluded from the study population. They found no cases of impaired renal function or hypertension 6 to 17 years after childhood UTI.

http://www.medscape.com/viewarticle/775519

Metformin Reduces Blood Glucose and BMI in Obese Children

Severely obese children and adolescents who took 1.5 g metformin daily reduced their body mass index SD scores (BMI-SDS) by 3% at 6 months without making significant changes to their diets and physical activity levels. The results of the randomized, placebo controlled trial from the UK, were published online November 21 and in the January 2013 issue of the *Journal of Clinical Endocrinology & Metabolism*. In the last 2 decades, the number of obese children and youth has soared, as have diagnoses of type 2 diabetes (T2D) and insulin resistance syndrome.

http://www.medscape.com/viewarticle/776216

Kawasaki Disease Diagnosed by Urine Proteins?

Of thousands of protein molecules found within urine, researchers using recently developed technologies have identified 2 proteins that hold promise as biomarkers of Kawasaki disease (KD), a rare disease that is the most common cause of acquired paediatric heart disease in the developed world. This is reported in an article published online December 20 in *EMBO Molecular Medicine*. Diagnosis of KD has been improved through the use of clinical algorithms and echocardiography, but if diagnosis and treatment are delayed, as many as 25% of patients may go on to develop coronary artery dilation or aneurysms.

http://www.medscape.com/viewarticle/776728

One-Third Cure Rate in First-Ever Pediatric Relapsed AML Trial

Over a third of children with relapsed acute myeloid leukaemia (AML) can be cured, a new study from the International BFM Study Group demonstrates. Relapse occurs in up to 40% of paediatric patients with AML. Overall survival after relapse ranges from 16% to 34% -- but there have been no randomized trials until now, so many

questions remain about how these children should be treated. Fludarabine, cytarabine and granulocyte-colony stimulating factor (FLAG) are commonly used for induction. It's unclear whether adding anthracyclines to FLAG helps survival after relapse. Anthracyclines at high doses can be cardiotoxic but research suggests that liposomal daunorubicin (DNX, DaunoXome) may be safer.

http://www.medscape.com/viewarticle/777872

Possible Coal Tar Therapy Mechanism for Eczema Identified

Researchers in the Netherlands have pinpointed a possible molecular mechanism by which the ancient remedy of coal tar may be a therapy for atopic dermatitis (AD), or eczema, according to an article published online January 25 in the *Journal of Clinical Investigation*. They conducted experiments first using human skin models from patients with AD and healthy volunteers and then using skin-equivalent models. They found that coal tar activates the aryl hydrocarbon receptor (AHR), which in turn induces expression of the filaggrin protein and promotes epidermal development. The process restores skin barrier. AD is associated with loss-of-function mutations in the skin barrier gene *filaggrin*.

http://www.medscape.com/viewarticle/778204

Vitamin C for Colds Shows Limited Benefit: Meta-Analysis

A meta-analysis of 72 trials examining the benefits of regular vitamin C supplementation concludes that although vitamin C may have a modest yet consistent effect on the duration of colds, it has no effect on the incidence of colds, except in people exposed to short periods of extreme physical stress. The review was published online January 31 in *Cochrane Database of Systemic Reviews*. Vitamin C has been touted for treating respiratory infections since it was first isolated during the 1930s, the authors point out. The number of people taking vitamin C supplements rose dramatically in the 1970s, after Nobel laureate Linus Pauling, citing earlier placebo-controlled trials, concluded that vitamin C could help prevent colds as well as reduce cold symptoms after onset. Still, much controversy continues about the benefits of vitamin C supplementation.

http://www.medscape.com/viewarticle/779063

B J C Perera
Joint Editor

IMPORTANT NOTICE

Further to our notification in the previous issue of the journal, no comments regarding the usefulness of “Snippets from the web” have been received from the readers.

We would like to request the readers to respond with their comments to <**drgnlucas@gmail.com**> regarding this feature which has been in the journal for several years.

If no positive comments are received, this feature will be discontinued from the next issue.

Joint Editors